REMARKS

Claims 1-56 are rejected. Claims 6-8, 20-22, 34-36, and 48-50 are canceled. Claims 1-5, 9-11, 13-19, 23-25, 27-33, 37-39, 41-47, 51-53, and 55-56 are amended. Claims 12, 26, 40, and 54 remain in their original form. No new matter is present. Claims 1-5, 9-19, 23-33, 37-47, and 51-56 remain in the case for reconsideration. Reconsideration and allowance of the claims is respectfully requested in light of the following remarks.

Claim Rejections – 35 USC § 103

Claims 1-56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Agrawal. et al. (Agrawal). U.S. Patent No. 6,788,660 B1 in view of Thomas et al. (Thomas). U.S. Patent No. 6,751,652 B1.

Applicant respectfully traverses the rejections.

As described in the specification, two standards for signaling and control of Internet telephone calls include ITU-T Recommendation H.323 and the IETF Session Initiation Protocol (SIP). Interoperability between these protocols is an issue. That is, SIP devices are not usable with H.323 networks, and H.323 devices are not usable with SIP networks.

The claimed invention allows SIP user agents to call H.323 terminals and vice versa. When a SIP device wants to establish communications with a device in an H.323 network, the SIP device sends an invite message. The network switch 310 then allows the SIP device to access the H.323 network and communicate with the called device by converting the SIP invite message to an H.323 request message and also converting an H.323 response message to a SIP reply message. Similarly, when an H.323 terminal wants to establish communications in a SIP network, the H.323 terminal sends a request message. The network switch 410 then allows the H.323 terminal to access the SIP network and communicate with the called device by converting the H.323 request message to a SIP location request message and also converting a SIP response message to an H.323 reply message.

Claim 1 is amended to clarify that the device comprises a processor adapted to *convert the message received in the second signaling protocol to a message in the first signaling protocol.* Support for the amendment is found in the original specification, among other places, in FIG. 7 and on page 7, lines 23-25. Neither Agrawal nor Thomas, alone or in combination, teaches such a device.

In rejecting claim 1, the Examiner asserts that Agrawal discloses:

... a processor coupled with the network interface (FIG. 6, items 330-1 and 626; col. 5, lines 19-36), in which the processor is adapted to

receive and analyze a invite message (col. 5, lines 54-67; col. 6, lines 1-28);

generate a H.323 request message responsive to the analyzed invite message (col. 5, lines 54-67; col. 6, lines 1-28)...

Agrawal does not perform any conversions between protocols, as taught in the claimed invention. Instead, Agrawal modifies and extends the conventional H.323 signaling to wireless/mobile devices. To implement this, Agrawal teaches using "active packets" and includes the following steps in the conventional H.323 signaling: sending an active packet to GK A in the initial step of signaling (step 200-1); adding a new field designated as "activeStation" to the original Admissions Confirm (ACF), which notifies the caller that an agent has been created and the agent will perform the H.245 procedures (steps 200-4 and 200-8); and sending the active packet to the instantiated agent and informing the agent to perform the H.245 procedures (step 300-9). See Agrawal, FIGS. 2 and 3; col. 7, line 25 – col. 9, line16.

In the sections cited by the Examiner, Agrawal discusses the conventional signaling steps to setup a call between two gatekeepers located in two H.323 zones which include using H.225.0 protocol to establish the connection (See FIG. 2, steps 200-1 to steps 200-9) and H.245 to establish the call, negotiate capabilities, and open logical channels (See FIG. 2, steps 200-10 to steps 200-17) between two terminals. Agrawal then teaches using active packets to extend the signaling defined in H.323 to wireless/mobile devices. See Agrawal, FIG. 3: col. 7, line 25 – col. 9, line 24. The active packets instantiate "agents" in gatekeepers 330-1 and 330-2, and the agents represent the mobile terminals 301 and 302 during the H.245 signaling phase (FIG. 3, step 200-10 to step 200-17). "Active-capable" gatekeeper 330-1 receives an active packet that may include the H.323 request message and parses the program and data portions from the active packet in a data and program separator 622. Gatekeeper 330-1 further comprises a processor 626 adapted to run the agent process 629 and memory 630 for storing the parsed program and data and stored programs executed by the agent process 629. See Agrawal, FIG. 6; col. 10, lines 24-60.

Although Agrawal suggests that the embodiments disclosed provide a framework for other standards/protocols (See col. 4, lines 29-32), nowhere does Agrawal teach or disclose a processor adapted to receive and analyze a message in one protocol (i.e., SIP invite message)

Docket No. 2705-184   Page 13 of 18   Application No. 10/086,840

and then convert the received and analyzed message to a message in another protocol (i.e., H.323 request message).

Neither does Thomas, alone nor in combination with Agrawal, support the Examiner's rejections. Thomas teaches clearinghouse service architectures that can accommodate the addition of "intelligent" end user devices for an Internet telephony system. See Abstract. Thus, rather than relying solely on gateways for access to clearinghouse services, Thomas allows intelligent end user devices access to these services. See Thomas, col. 1, lines 39-43. Thomas discloses three different architectures for accommodating intelligent end user devices into clearinghouse service networks. In describing the proxy-based model, Thomas defines proxy systems to include H.323 gatekeepers, SIP proxy servers, and proprietary devices. See Thomas, FIG. 2; col. 4, lines 29-32. Thomas qualifies, in col. 4, lines 60-63, that "Although the exemplary example of FIG. 2 illustrates an H.323 protocol implementation in both legs, end user devices could use SIP, or even a proprietary protocol to communicate with the proxy system." As cited by the Examiner, Thomas, in col. 5, lines 55-60, also asserts that "Although the proxy-based architecture shown in FIG. 2 is compatible with the H.323 protocol, it will be appreciated that the SIP protocol can be used to support communications by the proxy server 210 with the service point 215 and each terminating gateway 225." Although Thomas asserts that the proxy-based model (and the other two models) are compatible with either SIP or H.323 protocol, Thomas does not teach converting SIP messages to H.323 messages or vice versa.

In each of these architectures, Thomas suggests that the H.323 protocol or SIP (or even a proprietary protocol) may be used to transmit a call setup request. See Thomas, col. 4, lines 60-63; col. 5, lines 56-60; col. 7, lines 30-33; col. 8, lines 58-60; col. 9, lines 40-41; col. 11, lines 63-65. However, other than suggesting that either H.323 protocol or SIP could be used, Thomas does not teach or disclose a processor adapted to receive and analyze a message in one protocol (i.e., SIP invite message) and then convert the received and analyzed message to a message in another protocol (i.e., H.323 request message).

Neither Agrawal nor Thomas deal with interoperability between two protocols, i.e., SIP devices communicating with devices in H.323 networks or H.323 terminals communicating with SIP devices in SIP networks.

None of the prior art, alone or in combination, discloses claim 1. Therefore, withdrawal of the rejection is respectfully requested.

Claim 10 is amended to clarify that the device comprises a processor adapted to *convert the analyzed H.323 request message to a SIP location request message*. Support for the amendment is found in the original specification, among other places, in FIG. 8 and on page 9, lines 4-6. Claim 15 is amended to clarify that the device comprises a *means for converting the analyzed SIP invite message to an H.323 request message*. Claim 24 is amended to clarify that the device comprises a *means for converting the analyzed H.323 request message to a SIP location request message*. As discussed above, neither Agrawal nor Thomas teaches a processor that receives and analyzes a message in one protocol and converts the received and analyzed message to a message in another protocol, i.e., from H.323 protocol to SIP and vice versa. None of the prior art, alone or in combination, discloses claims 10, 15, and 24. Therefore, withdrawal of the rejections is respectfully requested.

Claims 29 and 38 amended to clarify that the instructions when executed result in *converting the message received in the second signaling protocol to a message in the first signaling protocol* and *converting the analyzed H.323 request message to a SIP location request message*, respectively. As discussed above, neither Agrawal nor Thomas teaches a processor that receives and analyzes a message in one protocol and converts the received and analyzed message to a message in another protocol, i.e., from H.323 protocol to SIP and vice versa. None of the prior art, alone or in combination, discloses claims 29 and 38. Therefore, withdrawal of the rejections is respectfully requested.

Claims 43 and 52 are amended to clarify that the method comprises *converting the message received in the second signaling protocol to a message in the first signaling protocol* and *converting the analyzed H.323 request message to a SIP location request message*, respectively. As discussed above, neither Agrawal nor Thomas teaches a processor that receives and analyzes a message in one protocol and converts the received and analyzed message to a message in another protocol, i.e., from H.323 protocol to SIP and vice versa. None of the prior art, alone or in combination, discloses claims 43 and 52. Therefore, withdrawal of the rejections is respectfully requested.

Claims 2-5 and 9, dependent on amended independent claim 1, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claims 6-8 are canceled. Claims 2 and 3 have been amended to further define the first and second signaling protocols. Claim 4 is also amended to further clarify that the processor is

further adapted to *convert the response message received in the first signaling protocol to a reply message in the second signaling protocol*. Claims 4 and 9 are amended to clarify that, while the device transmits a message in the first signaling protocol to the network gatekeeper and receives a response message in the first signaling protocol, the reply to the messages is in terms of the second signaling protocol. None of the prior art, alone or in combination, discloses claims 2-5 and 9. Therefore, withdrawal of the rejections is respectfully requested.

Claims 11-14, dependent on amended independent claim 10, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claim 11 is amended to clarify that the request message is in H.323 protocol. Claim 12 remains in its original form. Claim 13 is also amended to further clarify that the processor is further adapted to *convert the SIP response message to an H.323 reply message*. Claims 13 and 14 are amended to clarify that, while the location request message transmitted to the SIP gatekeeper and the response message received are in SIP terms, the reply message to the received H.323 request message is in H.323 protocol. None of the prior art, alone or in combination, discloses claims 11-14. Therefore, withdrawal of the rejections is respectfully requested.

Claims 16-19 and 23, dependent on amended independent claim 15, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claims 20-22 are canceled. Claims 16 and 17 have been amended to further define the first and second signaling protocols. Claim 18 is also amended to further clarify that the device further comprises *means for converting the response message received in the first signaling protocol to a reply message in the second signaling protocol*. Claims 18 and 23 are amended to clarify that, while the device transmits a message in the first signaling protocol to the network gatekeeper and receives a response message in the first signaling protocol, the reply to the messages is in terms of the second signaling protocol. None of the prior art, alone or in combination, discloses claims 16-19 and 23. Therefore, withdrawal of the rejections is respectfully requested.

Claims 25-28, dependent on amended independent claim 24, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claim 25 is amended to clarify that the request message is in H.323 protocol. Claim 26 remains in its original form. Claim 27 is also amended to further clarify that the device further comprises *means for converting the SIP response message to an H.323 reply message*.

Docket No. 2705-184   Page 16 of 18   Application No. 10/086,840

Claims 27 and 28 are amended to clarify that. while the location request message transmitted to the SIP gatekeeper and the response message received are in SIP terms, the reply message to the received H.323 request message is in H.323 protocol. None of the prior art, alone or in combination, discloses claims 25-28. Therefore, withdrawal of the rejections is respectfully requested.

Claims 30-33 and 37, dependent on amended independent claim 29, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claims 34-36 are canceled. Claims 30 and 31 have been amended to further define the first and second signaling protocols. Claim 32 is also amended to further clarify that the storage medium has instructions that result in *converting the response message received in the first signaling protocol to a reply message in the second signaling protocol.* Claims 32 and 37 are amended to clarify that, while the instructions result in transmitting a message in the first signaling protocol to the network gatekeeper and receiving a response message in the first signaling protocol, the reply to the messages is in terms of the second signaling. None of the prior art, alone or in combination, discloses claims 30-37. Therefore, withdrawal of the rejections is respectfully requested.

Claims 39-42, dependent on amended independent claim 38, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claim 39 is amended to clarify that the request message is in H.323 protocol. Claim 40 remains in its original form. Claim 41 is amended to further clarify that the instructions further result in *converting the SIP response message to an H.323 reply message.* Claims 41 and 42 are also amended to clarify that, while the location request transmitted to the SIP gatekeeper and the response message received are in SIP terms, the reply message to the H.323 request message is in H.323 protocol. None of the prior art, alone or in combination, discloses claims 39-42. Therefore, withdrawal of the rejections is respectfully requested.

Claims 44-47 and 51, dependent on amended independent claim 43, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claims 48-50 are canceled. Claims 44 and 45 have been amended to further define the first and second signaling protocols. Claim 46 is also amended to further clarify that the method further comprises *converting the response message received in the first signaling protocol to a reply message in the second signaling protocol.* Claims 46 and 51 are amended to clarify that. while the method comprises transmitting a message in the first

Docket No. 2705-184   Page 17 of 18   Application No. 10/086,840

signaling protocol to the network gatekeeper and receiving a response message in the first signaling protocol, the reply to the messages is in terms of the second signaling protocol. None of the prior art, alone or in combination, discloses claims 44-51. Therefore, withdrawal of the rejections is respectfully requested.

Claims 53-56, dependent on amended independent claim 52, also are allowable because they depend from an allowable claim and recite further distinguishing limitations. Claim 53 is amended to clarify that the request message is in H.323 protocol. Claim 54 remains in its original form. Claim 55 is amended to further clarify that the method further comprises *converting the SIP response message to an H.323 reply message*. Claims 55 and 56 are also amended to clarify that, while the method comprises transmitting a location request message to the SIP gatekeeper and receiving a response message in SIP terms, the method comprises sending a reply message to the H.323 request message in H.323 protocol. None of the prior art, alone or in combination, discloses claims 53-56. Therefore, withdrawal of the rejections is respectfully requested.

Conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-5, 9-19, 23-33, 37-47, and 51-56 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.
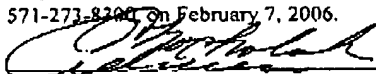
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I hereby certify that this correspondence is being transmitted to the U.S. Patent and Trademark Office via facsimile number 571-273-8300 on February 7, 2006.

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Docket No. 2705-184   Page 18 of 18   Application No. 10/086,840